

# M e m o r a n d u m

To: Panel Members Date: September 22, 2006

From: Creighton Chan, Manager Analyst: A. Nastari

Subject: One-Step Agreement for **ELECTRONIC INTERFACE INC. DBA APPLIED ENGINEERING**

## **CONTRACTOR:**

- Training Project Profile: Retraining: Companies W/Out-Of-State Competition
- Legislative Priorities: Moving To A High Performance Workplace  
Promotion Of California's Manufacturing Workforce,  
Expanding within California
- Type of Industry: Manufacturing
- Repeat Contractor: No
- Contractor's Full-Time Employees
  - Worldwide: 66
  - In California: 66
- ETP Trainees Represented by Union: No
- Name and Local Number of Union Representing ETP Trainees: N/A

## **CONTRACT:**

- Program Costs: \$160,512
- Substantial Contribution: \$0
- Total ETP Funding: \$160,512
- Total In-kind Contribution: \$157,320
  - Trainee Wages Paid During Training: \$157,320
  - Other Contributions: \$0
- Reimbursement Method: Fixed-Fee
- County(ies) Served: Santa Clara

## **INTRODUCTION:**

Electronic Interface Inc, DbA Applied Engineering (Applied Engineering), a small business founded in California in 1978, provides manufacturing to customer's specifications, assembly of parts and components in a clean-room environment, precision machining and grinding, and heavy parts assembly. The goods manufactured by Applied Engineering are used in the final assembly of products by domestic and international manufacturers in the automotive, semiconductor, chemical, and medical industries. Applied Engineering is eligible for standard retraining under Title 22 Code of Regulations (CCR) Section 4416(i)(1,2) as an industrially-defined manufacturer.

## **MEETING ETP GOALS AND OBJECTIVES:**

Applied Engineering proposes training that will further the following ETP goals and objectives:

- 1) Foster job retention in industries threatened by out-of-state competition.
- 2) Provide workers with the skills necessary to transition to a high performance workplace.

**TRAINING PLAN TABLE:**

Grp/Trainee Type	Types Of Training	No. Retain	No. Class/Lab Videocnf. Hrs.	No. CBT Hrs.	Cost Per Trainee	Hourly Wage After 90 Days
Job Number 1 Retrainees	MENU:  Business Skills  Computer Skills  Continuous Improvement  Manufacturing Skills	64	24-140	N/A	\$2,508	*\$12.90 - \$28.85
<b>Wages After 90-Day Retention</b>						
<b><u>Occupation</u></b>						
Managers Production Staff Support Staff Technical Staff						
<b><u>Health Benefits Used To Meet ETP Minimum Wage:</u></b> Health benefits of at least \$1.45 per hour may be added to meet the ETP minimum wage requirement of \$12.90 for Santa Clara County.					<b><u>Turnover Rate</u></b> 6%	<b><u>% Of Mgrs &amp; Supervisors To Be Trained:</u></b> 8%
<b><u>Other Employee Benefits:</u></b> Besides medical, dental and vision benefits, the company provides life and disability insurance, vacation, sick, holiday.						

### **COMMENTS / ISSUES:**

#### **➤ *Frontline Workers***

Of the 64 participants in this project 59 (92 percent) meet the Panel definition of frontline workers under Title 22 California Code of Regulations (CCR), Section 4400(ee). The remaining 5 supervisors and managers (8 percent) are not executive level staff and do not set company policy.

#### **➤ *Production During Training***

The proposed Contractor agrees that during ETP-funded training hours, trainees will not produce products or provide services which will ultimately be sold.

### **RECOMMENDATION:**

Staff recommends that the Panel approve this project because it will assist this small business in its initial move to a high performance workplace and in the expansion of its business initiatives, thereby allowing it to remain competitive in the manufacturing industry. Although the company has made vast efforts in achieving International Standardization Organization (ISO) Certification, it has realized that without having a trained workforce in continuous improvement and manufacturing skills the company may not be able to remain competitive and expand its processes to include new business initiatives. Approval of this project would further allow the company to provide secure, high-wage, high-skilled jobs for its workers.

### **NARRATIVE:**

To maintain global competitiveness and high quality manufacturing, while meeting the increase in production demands, Applied Engineering must upgrade and expand the technology and capabilities of its manufacturing and assembly lines, industrial controls, and clean-room operations. In 2004 the company implemented and achieved ISO Certification. This certification sets standards to make the development, manufacturing, and supply of products and service more efficient, safer and cleaner. However, Applied Engineering has determined that in order to maintain ISO Certification it must implement continuous improvement company-wide, improve its performance management systems and processes, and develop cross-functional teams.

ETP funds will assist the company in its transition to a high performance workplace that will use innovative methods to increase efficiencies, reduce scrap and defects. Training in business, computer, continuous improvement and manufacturing skills are required to meet the company's immediate goals.

**NARRATIVE:** (continued)

**Business Skills**

Training for support, technical staff, and managers will focus on customer service, upgraded sales and marketing techniques on the new services and manufacturing processes. Financial support staff will receive training in performance management skills. It is anticipated that the proposed training will further enhance staff's abilities to quickly respond to customers and improve market shares.

**Computer Skills**

In an effort to increase efficiencies and improve customer response time, Applied Engineering made a significant investment in high-tech and upgraded software systems. Training in the company's Materials Resource Planning (MRP) system will be provided to cross-train employees in critical functions such as bidding, inventory management and job tracking. These are all areas that will improve productivity and increase response time to the customer. The company's Customer Relationship Management system (CRM) will integrate the company's scheduling, planning, and human resource programs for consistent dissemination of information.

Enhanced software programs will expand the machinists and machine programming capabilities. Auto Computer Aided Design (CAD) software will provide trainees the skills to download customer's software and settings to Applied Engineering's machining and inspection equipment programs. The implementation of these systems will greatly reduce the set-up time now required to produce or inspect a customized part and it will provide true customization.

**Continuous Improvement Skills**

In order to meet increasing business demands and create a smooth transition during the implementation of new technology and services, Applied Engineering must develop a workforce that will function as one team. The company has outlined a curriculum that will provide its workers with skills that will improve efficiencies, productivity and quality. Training in topics such as Frontline Decision Making and Problem Solving, Quality Management, Leadership for Frontline Workers, High Performance Work Teams and Six Sigma are critical for the company's move to a cross-functional high performance workplace. All trainees will receive one or more topics as determined necessary by the management team. The company anticipates that after the training frontline workers will have the skills necessary to problem solve and implement advanced processes.

**Manufacturing Skills**

Training in the operation of new machinery required for the assembly and cleaning of new and additional products requires the company to implement the latest programming capabilities required for the operation of updated equipment and the handling of a wider range of materials. Applied Engineering's new equipment is driven by software programs that are set to the customer's product specifications.

Training and cross-training in enhanced Clean Room Technical Skills, Special Chemical Handling, Lean Manufacturing Practices, production and equipment operations, machining,

**NARRATIVE:** (continued)

inspection and programming processes, as well as inventory and warehousing processes are required in order for the company to meet its expansion goals.

Machinists who typically specialize in the production of either Lathe (round parts) or Mill (rectangular parts), but rarely perform both functions, will be cross-trained in the two processes in order to eliminate the production back-up that occurs during a high demand for a product. It's the company's expectation that the proposed training will reduce cycle time, eliminate waste, and increase production resulting in cost savings and secure employment for its workforce.

***Commitment to Training***

The company representative reports that past and current training has been limited to new hire orientation, pilot programs, ISO Certifications and on-the-job training (OJT) for specific job functions. It was during the process of achieving ISO Certification that Applied Engineering became aware that if it is to maintain its certification, the company must implement a high performance workplace. Therefore, Applied Engineering invested in training a core group of employees in continuous improvement training to begin the process of identifying areas and processes where improvement is needed.

Company representatives report that the company's training budget has been increased by 52% for the 2006/2007 calendar year. However, it is only enough to cover the company's existing training such as ISO Certification, OJT and new hire orientation and not enough to cover the proposed training plan. ETP funds will allow the company to upgrade its workers' skills and create a cross-functional workforce that will meet the company's ongoing business initiatives.

**SUBCONTRACTORS:**

- Stack Consulting, Cupertino, CA will provide training in business and continuous improvement skills at an estimated cost of \$16,000.
- Integrated Management Marketing Systems, Livermore, CA, will provide training in continuous improvement skills at an estimated cost of \$4,000.
- Sallyanne Monti, Consultant, San Francisco, CA, will provide project administration services at a cost not to exceed 13 percent of the amount earned.

**THIRD PARTY SERVICES:**

- Sallyanne Monti, Consultant, San Francisco, CA, provided assistance with the development of the training plan, curriculum, and ETP documentation at a cost of \$5,000.

**Electronic Interface Inc. Db a Applied Engineering**

MENU CURRICULUM

Class/Lab Hours

24-140

Trainees will receive any of the following:

**BUSINESS SKILLS**

- Customer Service in a Global Market
- Marketing with Quality
- Product Development
- Performance Management

**COMPUTER SKILLS**

- Computer Equipment
  - Networking Hub
  - Hardware Components
- Computer Software
  - AutoCAD
  - Finance Integration
  - Networking
  - Machining
  - Quality/Inspection Integration
  - Scheduling
- Customer Relationship Management (CRM)
- Manufacturing Resource Planning (MRP)

**CONTINUOUS IMPROVEMENT SKILLS**

- Creating a Visual Workplace
- Continuous Improvement Implementation
- Frontline Decision Making and Problem Solving
- High Performance Work Teams
- Leadership for Frontline Workers
- Non-conforming Products
- Quality Management
- Six Sigma

**MANUFACTURING SKILLS**

- Assembly Operations
- CMM Inspection Machining & Programming
- CNC Machining & Programming
- Chemical Technical Skills
- Clean Room Technical Skills
- Drawing Interpretation
- Electro-Static Discharge (ESD)
- Equipment Operations

**Electronic Interface Inc. Db a Applied Engineering**

MENU CURRICULUM (continued)

MANUFACTURING SKILLS (continued)

- Geometric Dimension and Tolerance (GD&T)
- Lean Manufacturing Practices
- Mechanical Technical Skills
- Packaging
- Production Operations
- Scheduling

Comment: The parties agree that the training identified in this Curriculum may be revised from time-to-time during the term of this Agreement at the request of Contractor and with the prior written approval of ETP. (See also Section 12 in this Agreement.)